291 coordinate table
292 correspondence relationship table
300, **400** slide rail
301, **401** slider
402 slide bar
403 laser sensor
404 mat
A**11**, A**12**, A**13**, A**14**, A**21**, A**22**, A**23**, A**24** electrode
Sv abdominal area fat area

The invention claimed is:

1. A fat mass measurement apparatus for measuring a fat mass in a body based on a body impedance measured by bringing impedance measurement electrodes into contact with a measurement subject's body surface, the apparatus comprising:

impedance measurement electrodes configured to come into contact with a measurement subject's body surface;

an electrode support unit that supports said impedance measurement electrodes so as to be capable of making contact with the body surface;

a position detection means for detecting a predetermined position in a trunk area of the measurement subject;

an area detection means for detecting a predetermined area in the trunk area using the position detected by said position detection means;

an electrode position setting means for setting, on the body surface at said predetermined area detected by said area detection means, a plurality of positions along a vertical direction of the trunk area for measuring said body impedance;

a movement unit that moves said electrode support unit along said vertical direction of the trunk area;

an impedance measurement means for measuring said body impedance by bringing said impedance measurement electrodes into contact with each of the plurality of positions set by said electrode position setting means,

wherein said impedance measurement means comprises:

a movement amount determination means for determining, for each of the plurality of positions on the body surface set by said electrode position setting means, a movement amount of said movement unit based on those positions; and

a movement control means for controlling said movement unit based on the movement amounts for the plurality of positions determined by said movement amount determination means so as to move said electrode support unit to those positions; and

a fat mass calculation means for calculating a fat mass of said predetermined area based on said body impedances at each of said plurality of positions measured by said impedance measurement means and a size of the trunk area at said predetermined area.

2. The fat mass measurement apparatus according to claim **1**,

wherein said fat mass calculation means calculates a fat volume of said predetermined area by calculating, for each of said plurality of positions, a fat area corresponding to those positions using a predetermined formula based on said body impedance and a circumferential length of the trunk area at said predetermined area, and integrating said calculated fat areas.

3. The fat mass measurement apparatus according to claim **1**, further comprising:

an electrode arrangement unit in which said plurality of impedance measurement electrodes are arranged so as to be capable of making contact with the body surface at an area of said body that includes at least said predetermined area,

wherein said impedance measurement means comprises:

an electrode selection means for selecting, based on each of the plurality of positions on the body surface set by said electrode position setting means, the impedance measurement electrodes to be brought into contact with those positions on the body surface, from among said plurality of impedance measurement electrodes arranged in said electrode arrangement unit.

4. The fat mass measurement apparatus according to claim **1**,

wherein said position detection means comprises:

a mark detection means for detecting a mark, provided in relation to the body, for specifying said predetermined position, and

wherein said predetermined position is detected based on an output of said mark detection means.

5. The fat mass measurement apparatus according to claim **1**,

wherein said position detection means further comprises:

a sensor arrangement portion in which a plurality of pressure sensors capable of detecting a pressure resulting from a weight of an area of the body that includes said predetermined area are disposed, and

wherein said predetermined area in the trunk area is detected based on detection signals from the plurality of pressure sensors in said sensor arrangement portion.

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